Permit Writer	Jonathan Carney
Email Address	Jonathan.W.Carney@wv.gov
Company Name	Ascent Resources – Marcellus, LLC
Company ID	103-00098
Facility Name	W.J. Criswell
Permit Number	R13-3350
County	Wetzel
Newspaper	Wetzel Chronicle
Company Contact & Email	Tim Cummings No e-mail given.
Environmental Contact Email Address	evan.pearson@ascentresources.com
Regional Office (if applicable)	NPRO
New or Modified Source?	Modified
Construction, Modification, or Relocation?	Modification
Type of Facility	natural gas production facility
"Located" or "To Be Located"?	Located
Place where I can find electronic versions of your notice, engineering evaluation, and draft permit	Q:\AIR_QUALITY\J_Carney\103-00098 Ascent Resources - Marcellus, LLC WJ Criswell 405

publish Wed Mar 8 2017
30 days Fri Apr 7 2017

emails prepped

pk 4 publish

Permit / Application Information Sheet
Division of Environmental Protection
West Virginia Office of Air Quality

Company:	Ascent Resources - Marcellus, LLC			**Facility:**	WJ Criswell 405
Region:	2	**Plant ID:**	103-00098	**Application #:**	13-3350
Engineer:	Carney, Jonathan			**Category:**	
Physical Address:	Four Mile Rd Wileyville WV			**SIC:** [1311] OIL AND GAS EXTRACTION - CRUDE PETROLEUM & NATURAL GAS **NAICS:** [211111] Crude Petroleum and Natural Gas Extraction	
County:	Wetzel				
Other Parties:	ENV_CONT - Pearson, Evan Foster 405-252-7753				

Information Needed for Database and AIRS
1. Need valid physical West Virginia address with zip

Regulated Pollutants

Summary from this Permit 13-3350

Air Programs		Applicable Regulations
Fee Program	**Fee**	**Application Type**
	$2,000.00	MODIFICATION

Notes from Database

Activity Dates

APPLICATION RECIEVED	11/16/2016
APPLICATION FEE PAID	11/17/2016
ASSIGNED DATE	11/17/2016

NON-CONFIDENTIAL

Please note, this information sheet is not a substitute for file research and is limited to data entered into the AIRTRAX database.

Company ID: 103-00098
Company: Ascent Resources - Marcellus,
Printed: 11/17/2016
Engineer: Carney, Jonathan

INTERNAL PERMITTING DOCUMENT TRACKING MANIFEST

Company Name Ascent Resources - Marcellus, LLC

Permitting Action Number R13-3350 Total Days_____ DAQ Days_____

Permitting Action:

- ○ Permit Determination
- ○ General Permit
- ○ Administrative Update
- ○ Temporary
- ○ Relocation
- ○ Construction
- ○ Modification
- ○ PSD (Rule 14)
- ○ NNSR (Rule 19)

Documents Attached:

- ☑ Engineering Evaluation/Memo
- ☑ Draft Permit
- ☑ Notice
- ○ Denial
- ○ Final Permit/General Permit Registration
- ○ Completed Database Sheet
- ○ Withdrawal
- ○ Letter
- ○ Other *(specify)*_____

Date	From	To	Action Requested
2/10/2017	Jonathan Carney	Bev McKeone	Review for Public Notice
2/24	Bev	Jonathan	See comments - Addition - Cut to Notice
2/27/2017	Jonathan Carney	Sandie Adkins	To Public Notice

NOTE: Retain a copy of this manifest for your records when transmitting your document(s).

AIR QUALITY PERMIT NOTICE

Notice of Intent to Approve

On, November 16, 2016 Ascent Resources-Marcellus, LLC applied to the WV Department of Environmental Protection, Division of Air Quality (DAQ) for a permit to modify a natural gas production facility located in Wetzel County, WV at 39.607368 latitude and -80.618285 longitude. A preliminary evaluation has determined that all State and Federal air quality requirements will be met by the proposed facility. The DAQ is providing notice to the public of its preliminary determination to issue the permit as Permit R13-3350.

The following changes in potential emissions will be authorized by this permit action: Carbon Monoxide, 21.50 TPY increase; Nitrogen Oxides, 2.64 TPY decrease; Particulate Matter less than 10 microns, 3.91 tons per year (TPY) decrease; Volatile Organic Compounds, 16.71 TPY increase; Total Hazardous Air Pollutants, 0.21 TPY decrease.

Written comments or requests for a public meeting must be received by the DAQ before 5:00 p.m. on TBD by Sandra. A public meeting may be held if the Director of the DAQ determines that significant public interest has been expressed, in writing, or when the Director deems it appropriate.

The purpose of the DAQ's permitting process is to make a preliminary determination if the proposed modification will meet all state and federal air quality requirements. The purpose of the public review process is to accept public comments on air quality issues relevant to this determination. Only written comments received at the address noted below within the specified time frame, or comments presented orally at a scheduled public meeting, will be considered prior to final action on the permit. All such comments will become part of the public record.

Jonathan Carney
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Telephone: 304/926-0499, ext. 1203
FAX: 304/926-0478

Additional information, including copies of the draft permit, application and all other supporting materials relevant to the permit decision may be obtained by contacting the engineer listed above. The draft permit and engineering evaluation can be downloaded at:

www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx

west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0475
Fax: (304) 926-0479

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

BACKGROUND INFORMATION

Application No.:	R13-3350
Plant ID No.:	103-00098
Applicant:	Ascent Resources-Marcellus, LLC
Facility Name:	WJ Criswell 405
Location:	Four Mile Rd, Wileyville, WV
NAICS Code:	2111111
Application Type:	Modification
Received Date:	November 16, 2016
Engineer Assigned:	Jonathan Carney
Fee Amount:	$2000.00
Date Received:	November 17, 2016
Complete Date:	December 14, 2016
Due Date:	March 13, 2016
Applicant Ad Date:	November 16, 2016
Newspaper:	Wetzel Chronicle
UTM's:	Easting: 532.769 km Northing: 4,384.25 km Zone: 17
Description:	Removing one (1) natural gas-fired compressor engine and updating the productionand tank information and requesting a conversion to a Rule 13 permit from G70-A124B issued August 18, 2015.

DESCRIPTION OF PROCESS

The following description is from the application having the application number 13-3350:

Natural gas, condensate, and produced water flow from the three (3) wellheads located on the WJ Criswell 405 facility. The inlet streams are first routed through the three (3) 1.5 million British thermal units per hour (MMBtu/hr) gas production units (GPUs) (GPU-1 to GPU-3) where the first stage of fluid separation occurs. The GPUs separate the well stream flow into a high pressure natural gas sales stream and condensate liquid stream. In the second stage of separation, the liquid streams are routed through one (1) 1.5 MMBtu/hr line heater (HTR-1) to aid in the downstream separation process.

The fluids are then routed to the 1.0 MMBtu/hr low pressure flash separator heater (SEP-1) where condensate and produced water are separated. The flash from the low pressure separator is sent to the storage tanks, which are controlled by an enclosed combustor (CTRL-1). Produced water from the flash separator is routed to three (3) 400-bbl produced water storage tanks (PTK-1 to PTK-3). The condensate from the flash separator is typically routed to the three (3) 400-bbl condensate storage tanks (CTK-1 to CTK-3).

The natural gas stream will exit the facility for transmission via pipeline. Condensate and produced water are transported offsite via tank truck (TRL-1 and TRL-2). Flashing, working, and breathing, emissions from the three (3) 400-bbl produced water storage tanks and three (3) 400-bbl condensate storage tanks will be routed to the enclosed combustion device (CTRL-1).

A 1,200 bbl/day condensate stabilizer with a 0.75 MMBtur/hr burner assembly (CS-1) raises the temperature of the condensate and drives off hydrocarbons. These hydrocarbons are then transferred under pressure to the natural gas liquids (NGL) tank on site. The depleted condensate stream is transferred to the three (3) 400-bbl condensate storage tanks.

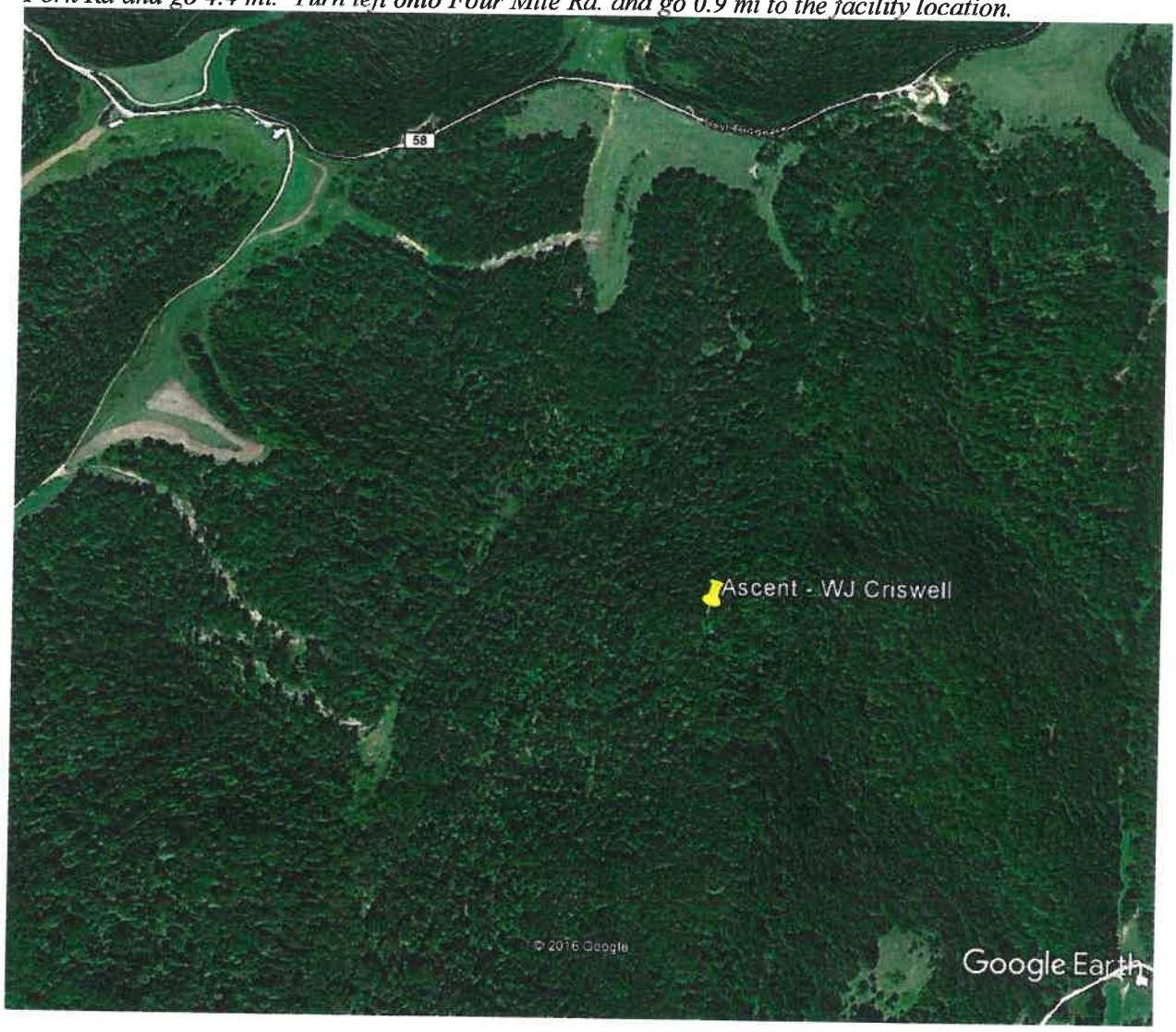
Loading of the condensate tank directly from the flash separator without the use of the condensate stabilizer shall occur as field conditions deem it necessary based upon condensate production.

One (1) 47 horsepower (hp) HiPower prime-power natural gas generator (ENG-2) is located on-site for facility electrical generation.

SITE INSPECTION

A full on site inspection was performed by DEP inspector, Mr. Greigory Paetzold. The overall result of the inspection was in compliance.

Directions: From Wileyville, WV, head south on Fairview Ridge Rd. toward WV-7 W. Turn left at the first cross street onto WV-7 E for 1.6 mi. Turn right onto Barker Run Rd. and go 3.6 mi. Turn left onto N Fork Rd and go 4.4 mi. Turn left onto Four Mile Rd. and go 0.9 mi to the facility location.



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this application consist of the combustion emissions from three (3) gas production units, one (1) line heater, one (1) flash separator heater, one (1) condensate stabilizer heater, one (1) enclosed combustor and one (1) generator and the VOC and HAP emissions from storage tanks, and liquid loading operations..

Emission Point ID#	Process Equipment	Calculation Methodology
GPU-1 through GPU-3	1.50 MMBTU/hr Gas Production Units	EPA AP-42 Emission Factors
HTR-1	1.50 MMBTU/hr Line Heater	EPA AP-42 Emission Factors
SEP-1	1.00 MMBTU/hr Flash Separator Heater	EPA AP-42 Emission Factors
CS-1	0.75 MMBTU/hr Condensate Stabilizer Heater	EPA AP-42 Emission Factors
CTK-1 through CTK-3	400 bbl Condensate Storage Tanks	EPA Tanks 4.09
PTK-1 through PTK-3	400 bbl Produced Water Storage Tank	EPA Tanks 4.09
CRTL-1	18.42 MMBTU/hr Enclosed Combustor	EPA AP-42 Emission Factors
TRL-1	Condensate Truck Loading	EPA AP-42 Emission Factors
TRL-2	Produced Water Truck Loading	EPA AP-42 Emission Factors
ENG-2	47 hp HiPower PSI/GM 3.0L Generator	Manufacturer's Data, EPA AP-42 Emission Factors/40 CFR 60 Subpart JJJJ

The change in total facility PTE for the WJ Criswell 405 facility is shown in the following table:

Pollutant	G70-A124B PTE (tons/year)	R13-3350 PTE (tons/year)	PTE Change (tons/year)
Nitrogen Oxides	12.71	10.07	-2.64
Carbon Monoxide	13.32	34.82	21.50
Volatile Organic Compounds	6.62	14.06	7.44
Particulate Matter-10/2.5	4.19	0.28	-3.91
Total HAPs	0.41	0.17	-0.21
Carbon Dioxide Equivalent	13,986	17,803	3,817

Maximum detailed controlled point source emissions were calculated by Ascent Resources – Marcellus, LLC and checked for accuracy by the writer and are summarized in the table on the next page.

Emission Point ID#	Emission Point ID#	Emission Unit Description	NOx		CO		VOC		PM_{10}		SO_2		Total HAPs	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
GPU-1	1E	Gas Production Unit	0.15	0.64	0.12	0.54	0.01	0.04	0.01	0.05	<0.01	<0.01	0.003	0.01
GPU-2	2E	Gas Production Unit	0.15	0.64	0.12	0.54	0.01	0.04	0.01	0.05	<0.01	<0.01	0.003	0.01
GPU-3	3E	Gas Production Unit	0.15	0.64	0.12	0.54	0.01	0.04	0.01	0.05	<0.01	<0.01	0.003	0.01
HTR-1	4E	Line Heater	0.15	0.64	0.12	0.54	0.01	0.04	0.01	0.05	<0.01	<0.01	0.003	0.01
SEP-1	7E	Flash Separator Heater	0.10	0.43	0.08	0.36	0.01	0.02	0.01	0.03	<0.01	<0.01	0.002	0.01
CS-1	11E	Condensate Stabilizer Heater	0.07	0.32	0.06	0.27	<0.01	0.02	0.01	0.02	<0.01	<0.01	<.0.01	0.01
CTK-1	15E	Condensate Storage Tank	-	-	-	-	-	1.82	-	-	-	-	-	-
CTK-2	16E	Condensate Storage Tank	-	-	-	-	-	1.82	-	-	-	-	-	-
CTK-3	17E	Condensate Storage Tank	-	-	-	-	-	1.82	-	-	-	-	-	-

Emission Point ID#	Emission Point ID#	Emission Unit Description	NOx		CO		VOC		PM_{10}		SO_2		Total HAPs	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
PTK-1	18E	Produced Water Storage Tank	-	-	-	-	-	0 .01	-	-	-	-	-	-
PTK-2	19E	Produced Water Storage Tank	-	-	-	-	-	0.01	-	-	-	-	-	-
PTK-3	20E	Produced Water Storage Tank	-	-	-	-	-	0.01	-	-	-	-	-	-
CRTL-1	10E	Enclosed Combustor	1.22	5.36	6.82	29.85	1.35	5.90	-	-	-	-	-	-
TRL-1	12E	Condensate Truck Loading	-	-	-	-	58.95	2.82	-	-	-	-	-	-
TRL-2	13E	Produced Water Truck Loading	-	-	-	-	0.59	0.14	-	-	-	-	<0.01	<0.01
ENG-2	9E	HiPower PSI/GM 3.0L Generator	0.29	1.27	0.50	2.18	0.01	0.05	0.01	0.03	<0.01	<0.01	0.02	0.07
FUG-1	14E	Sitewide Fugitive	-	-	-	-	2.13	9.27	-	-	-	-	-	-
ROAD-1	21E	Unpaved Road Sources	-	-	-	-	-	-	0.22	0.96	-	-	-	-

REGULATORY APPLICABILITY

45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers) is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units.

45CSR2 states that any fuel burning unit that has a heat input under ten (10) MMBTU/hr is exempt from Sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the gas production units (GPU-1 through GPU-3), line heater (HTR-1), flash separator heater (SEP-1) and condensate stabilizer heater (CS-1) are below 10 MMBtu/hr. Therefore, these units are exempt from the aforementioned sections of 45CSR2.

Ascent Resources -Marcellus, LLC is subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average.

45CSR6 (To Prevent and Control Air Pollution from the Combustion of Refuse)

45CSR6 prohibits open burning, establishes emission limitations for particulate matter, and establishes opacity requirements. Sources subject to 45CSR6 include completion combustion devices, enclosed combustion devices, and flares.

Ascent Resources -Marcellus, LLC has one (1) enclosed combustor at the facility. The enclosed combustor is subject to section 4, emission standards for incinerators. The enclosed combustor has negligible hourly particulate matter emissions. Therefore, the facility's enclosed combustor should demonstrate compliance with this section. The facility will demonstrate compliance by maintaining records of the amount of natural gas consumed by the enclosed combustor. The facility will also monitor the pilot flame of the enclosed combustor and record any malfunctions that may cause no flame to be present during operation.

45CSR10 (To Prevent and Control Air Pollution from the Emission of Sulfur Oxides)

45CSR10 establishes emission limitations for SO_2 emissions which are discharged from stacks of fuel burning units. A "fuel burning unit" means and includes any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Sources that meet the definition of "Fuel Burning Units" per 45CSR10-2.8 include GPUs, in-line heaters, heater treaters, and glycol dehydration unit reboilers.

It is written in 45CSR10 that a fuel burning unit with a heat input of less than 10 MMBtu/hr is exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the gas production units (GPU-1 through GPU-3), line heater (HTR-1), and flash separator heater (SEP-1) and condensate stabilizer heater (CS-1) are below 10 MMBtu/hr. Therefore, these units are exempt from the aforementioned sections of 45CSR10.

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

A 45CSR13 modification permit applies to this source due to the fact that Ascent Resources – Marcellus, LLC modification results in an emissions increase of volatile organic compounds greater than 6 lb/hr and 10 tpy and is subject to a substantive requirement of an emission control rule (40CFR60 Subpart JJJJ).

Ascent Resources – Marcellus, LLC paid the appropriate application fee and published the required legal advertisement for a modification permit application.

45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)

45CSR16 applies to this source by reference of 40CFR60 Subparts JJJJ and OOOO. These requirements are discussed under those rules below.

45CSR22 (Air Quality Management Fee Program)

Ascent Resources – Marcellus, LLC is not subject to 45CSR30. The WJ Criswell 405 well pad is subject to 40CFR60 Subparts JJJJ and OOOO, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

Ascent Resources – Marcellus, LLC is required to pay the appropriate annual fees and keep their Certificate to Operate current.

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)

Subpart JJJJ sets forth nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compound (VOC) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The 47 hp HiPower PSI/GM 3.0L Generator has an EPA certified engine. Maintenance and operation of this engine generator according to manufacturer instructions is required for this engine to continue to remain certified.

40CFR60, Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015)

EPA published in the Federal Register new source performance standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. 40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011. The following affected sources which commence construction, modification or reconstruction after August 23, 2011 are subject to the applicable provisions of this subpart:
Each gas well affected facility, which is a single natural gas well.

The WJ Criswell 405 well pad consists of four (4) natural gas wells. The wells were constructed after the August 23, 2011 applicability date. Therefore, the gas wells located at the facility are subject to the requirements of this subpart.

a. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your centrifugal compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

There are no centrifugal compressors at the WJ Criswell 405 well pad. Therefore, all requirements regarding centrifugal compressors under 40 CFR 60 Subpart OOOO would not apply.

b. Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your reciprocating compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

There is one reciprocating internal combustion engines located at the WJ Criswell 405 well pad that were constructed after August 23, 2011. However, a reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

c. Pneumatic Controllers

- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh which commenced construction after August 23, 2011, and is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not located at a natural gas processing plant.

- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller which commenced construction after August 23, 2011, and is located at a natural gas processing plant.

No pneumatic controllers were listed in the application.

d. Each storage vessel affected facility, which is a single storage vessel, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment.

40CFR60 Subpart OOOO defines a storage vessel as a unit that is constructed primarily of non-earthen materials (such as wood, concrete, steel, fiberglass, or plastic) which

provides structural support and is designed to contain an accumulation of liquids or other materials. The following are not considered storage vessels:

- Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If the source does not keep or are not able to produce records, as required by §60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel since the original vessel was first located at the site.

- Process vessels such as surge control vessels, bottoms receivers or knockout vessels.

- Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

This rule requires that the permittee determine the VOC emission rate for each storage vessel affected facility utilizing a generally accepted model or calculation methodology within 30 days of startup, and minimize emissions to the extent practicable during the 30 day period using good engineering practices. For each storage vessel affected facility that emits more than 6 tpy of VOC, the permittee must reduce VOC emissions by 95% or greater within 60 days of startup. The compliance date for applicable storage vessels is October 15, 2013.

The storage vessels located at the WJ Criswell 405 well pad are controlled by an enclosed combustor which will reduce the potential to emit to less than 6 tpy of VOC. Therefore, is not required by this section to further reduce VOC emissions by 95%.

e. The group of all equipment, except compressors, within a process unit is an affected facility.

- Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

- Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart.

- The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts VVa, GGG or GGGa of this part.

The WJ Criswell 405 well pad is not a natural gas processing plant. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants would not apply.

f. Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.

- Each sweetening unit that processes natural gas is an affected facility; and
- Each sweetening unit that processes natural gas followed by a sulfur recovery unit is an affected facility.
- Facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H_2S) in the acid gas (expressed as sulfur) are required to comply with recordkeeping and reporting requirements specified in §60.5423(c) but are not required to comply with §§60.5405 through 60.5407 and paragraphs 60.5410(g) and 60.5415(g) of this subpart.
- Sweetening facilities producing acid gas that is completely reinjected into oil-or-gas-bearing geologic strata or that is otherwise not released to the atmosphere are not subject to §§60.5405 through 60.5407, 60.5410(g), 60.5415(g), and 60.5423 of this subpart.

There are no sweetening units at the WJ Criswell 405 well pad. Therefore, all requirements regarding sweetening units under 40 CFR 60 Subpart OOOO would not apply.

40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. The engine (ENG-1) at the WJ Criswell 405 well pad is subject to the area source requirements for non-emergency spark ignition engines.

The applicability requirements for new stationary RICEs located at an area source of HAPs, is the requirement to meet the standards of 40CFR60 Subpart JJJJ. These requirements were outlined above. The proposed engine meets these standards.

The following rules do not apply to the facility:

45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants)

45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment)

The WJ Criswell 405 well pad is located in Wetzel County, which is an unclassified county for all criteria pollutants, therefore the WJ Criswell 405 well pad is not applicable to 45CSR19.

As shown in the following table, Ascent Resources – Marcellus, LLC is not a major source subject to 45CSR14 or 45CSR19 review. According to 45CSR14 Section 2.43.e, fugitive emissions are not

included in the major source determination because it is not listed as one of the source categories in Table 1. Therefore, the fugitive emissions are not included in the PTE below.

Pollutant	PSD (45CSR14) Threshold (tpy)	NANSR (45CSR19) Threshold (tpy)	WJ Criswell 405 PTE (tpy)	45CSR14 or 45CSR19 Review Required?
Carbon Monoxide	250	NA	34.82	No
Nitrogen Oxides	250	NA	10.07	No
Particulate Matter 2.5	250	NA	0.28	No
Ozone (VOC)	250	NA	23.33	No

45CSR30 (Requirements for Operating Permits)

Ascent Resources – Marcellus, LLC is not subject to 45CSR30. The WJ Criswell 405 well pad is subject to 40CFR60 Subparts JJJJ and OOOO, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

40CFR60 Subpart Kb (Standards of Performance for VOC Liquid Storage Vessels)

40CFR60 Subpart Kb does not apply to storage vessels with a capacity less than 75 cubic meters. The largest tanks that Ascent Resources – Marcellus, LLC has installed are 60.8 cubic meters each. Therefore, Ascent Resources – Marcellus, LLC would not be subject to this rule.

40CFR60 Subpart KKK (Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants)

40CFR60 Subpart KKK applies to onshore natural gas processing plants that commenced construction after January 20, 1984, and on or Before August 23, 2011. The WJ Criswell 405 well pad was constructed after August 23, 2011 and , therefore, Ascent Resources – Marcellus, LLC's WJ Criswell 405 well pad is not subject to this rule.

40CFR60 Subpart OOOOa (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after September 18, 2015)

EPA published its New Source Performance Standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. EPA published amendments to the Subpart on September 23, 2013 and June 3, 2016. 40CFR60 Subpart OOOOa establishes emission standards and compliance schedules for the control of the pollutant greenhouse gases (GHG). The greenhouse gas standard in this subpart is in the form of a limitation on emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification or reconstruction after September 18, 2015. This subpart also establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities that commence construction, modification or reconstruction after September 18, 2015. The effective date of this rule is August 2, 2016.

For the purposes of 60.5397a (LDAR), a "modification" to a well site occurs when a new well is drilled at an existing well site, a well at an existing well site is hydraulically fractured or refractured. This has not occurred, therefore, for the purposes of LDAR, a "modification" has not occurred.

No modifications occurred in regards to this rule.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. The following HAPs are common to this industry. The following table lists each HAP's carcinogenic risk (as based on analysis provided in the Integrated Risk Information System (IRIS)):

HAPs	Type	Known/Suspected Carcinogen	Classification
Formaldehyde	VOC	Yes	Category B1 - Probable Human Carcinogen
Benzene	VOC	Yes	Category A - Known Human Carcinogen
Ethylbenzene	VOC	No	Inadequate Data
Toluene	VOC	No	Inadequate Data
Xylenes	VOC	No	Inadequate Data

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health effects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*. For a complete discussion of the known health effects of each compound refer to the IRIS database located at *www.epa.gov/iris*.

AIR QUALITY IMPACT ANALYSIS

Modeling was not required of this source due to the fact that the facility is not subject to 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants) or 45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment) as shown in the table listed in the Regulatory Discussion section under 45CSR14/45CSR19.

SOURCE AGGREGATION

"Building, structure, facility, or installation" is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

The Source Determination Rule for the oil and gas industry was published in the Federal Register on June 3, 2016 and will become effective on August 2, 2016. EPA defined the term "adjacent" and stated that equipment and activities in the oil and gas sector that are under common control will be considered part of the same source if they are located on the same site or on sites that share equipment and are within ¼ mile of each other.

The Ascent Resources – Marcellus, LLC WJ Criswell 405 well pad will operate under SIC code 1311 (Natural Gas Production). There are other well pads operated by Ascent Resources – Marcellus, LLC that share the same two-digit major SIC code of 13 for natural gas production.

"Contiguous or Adjacent" determinations are made on a case by case basis. There are no other equipment and activities in the oil and gas sector that are under common control of Ascent Resources – Marcellus, LLC that are located on the same site or on sites that share equipment and are within ¼ mile of each other.

The WJ Criswell 405 well pad is not located on contiguous or adjacent properties with other facilities under common control, therefore, the emissions from this facility shall not be aggregated with other facilities for the purposes of making Title V and PSD determinations.

MONITORING OF OPERATIONS

Ascent Resources – Marcellus, LLC is required to perform the following monitoring:

- Monitor all applicable requirements of 40CFR60 Subparts JJJJ, OOOO, and 40CFR63 Subpart ZZZZ.
- Monitor the presence of the enclosed combustor pilot flames with a thermocouple or equivalent.
- Monitor for visible emissions from combustion units at such reasonable times as the Secretary may designate.

Ascent Resources – Marcellus, LLC will be required to perform the following recordkeeping:

- Maintain records of testing conducted in accordance with the permit. Said records shall be maintained on-site or in a readily accessible off-site location
- Maintain the corresponding records specified by the on-going monitoring requirements of and testing requirements of the permit.
- Maintain records of the visible emission opacity tests conducted per the permit.
- Maintain a record of all potential to emit (PTE) HAP calculations for the entire facility. These records shall include the natural gas compressor engines and ancillary equipment.
- Maintain records of all applicable requirements of 40CFR60 Subparts JJJJ and OOOO and 40CFR63 Subpart ZZZZ.
- Maintain records of the enclosed combustors design evaluation.
- The records shall be maintained on site or in a readily available off-site location maintained by Ascent Resources – Marcellus, LLC for a period of five (5) years.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates Ascent Resources – Marcellus, LLC WJ Criswell 405 well pad should meet all the requirements of applicable regulations. Therefore, impact on the surrounding area should be minimized and it is recommended that the Wetzel County location should be granted a 45CSR13 modification permit for their facility.

Jonathan Carney
Permit Writer

2/27/2017
DATE

West Virginia Department of Environmental Protection

Jim Justice
Governor

Division of Air Quality

Austin Caperton
Cabinet Secretary

Permit to Modify

R13- 3350

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Ascent Resources – Marcellus, LLC
WJ Criswell 405/Wetzel County
103-00098

William F. Durham
Director

Issued: DRAFT • *Effective: DRAFT*

This permit will supercede and replace General Permit Registration G70-A124B

Facility Location:	Wileyville, Wetzel County, West Virginia
Mailing Address:	PO Box 13678 Oklahoma City, OK 73113
Facility Description:	Natural Gas Production
NAICS Codes:	211111
UTM Coordinates:	532.769 km Easting • 4,384.25 km Northing • Zone 17
Permit Type:	Modification
Description of Change:	The applicant is removing one (1) natural gas-fired compressor engine and updating the production and tank information and has requested a conversion to a Rule 13 permit.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is not subject to 45CSR30.

Table of Contents

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
GPU-1	1E	Gas Production Unit	2015	1.50 MMBtu/hr	N/A
GPU-2	2E	Gas Production Unit	2015	1.50 MMBtu/hr	N/A
GPU-3	3E	Gas Production Unit	2015	1.50 MMBtu/hr	N/A
HTR-1	4E	Line Heater	2015	1.50 MMBtu/hr	N/A
SEP-1	7E	Flash Separator Heater	2015	1.00 MMBtu/hr	N/A
ENG-2	9E	Natural Gas-Fired Generator (HiPower PSI/GM 3.0L)	2015	47 hp	N/A
CS-1	11E	Condensate Stabilizer Heater	2015	0.75MMBtu /hr	N/A
CTK-1	15E	Tank 1 – Condensate Storage Tank	2015	400-bbl	CTRL-1
CTK-2	16E	Tank 2 – Condensate Storage Tank	2015	400-bbl	CTRL-1
CTK-3	17E	Tank 3 – Condensate Storage Tank	2015	400-bbl	CTRL-1
PTK-1	18E	Tank 4 – Produced Water Storage Tank	2015	400-bbl	CTRL-1
PTK-2	19E	Tank 5 – Produced Water Storage Tank	2015	400-bbl	CTRL-1
PTK-3	20E	Tank 6 – Produced Water Storage Tank	2015	400-bbl	CTRL-1
CTRL-1	10E	Enclosed Combustor	2015	18.42 MMBtu/hr	N/A
TRL-1	12E	Condensate Truck Loading	2015	N/A	N/A
TRL-2	13E	Produced Water Truck Loading	2015	N/A	N/A
FUG-1	14E	Sitewide Fugitive	2015	N/A	N/A
ROAD-1	21E	Unpaved Road Sources	2015	N/A	N/A
FUG-1	14E	Sitewide Fugitive	2015	N/A	N/A

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NOx**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor	**PM**	Particulate Matter
CES	Certified Emission Statement	**$PM_{2.5}$**	Particulate Matter less than 2.5 μm in diameter
C.F.R. *or* CFR	Code of Federal Regulations		
CO	Carbon Monoxide	**PM_{10}**	Particulate Matter less than 10μm in diameter
C.S.R. *or* CSR	Codes of State Rules		
DAQ	Division of Air Quality	**Ppb**	Pounds per Batch
DEP	Department of Environmental Protection	**Pph**	Pounds per Hour
		Ppm	Parts per Million
dscm	Dry Standard Cubic Meter	**Ppm_V or ppmv**	Parts per Million by Volume
FOIA	Freedom of Information Act		
HAP	Hazardous Air Pollutant	**PSD**	Prevention of Significant Deterioration
HON	Hazardous Organic NESHAP		
HP	Horsepower	**Psi**	Pounds per Square Inch
lbs/hr	Pounds per Hour	**SIC**	Standard Industrial Classification
LDAR	Leak Detection and Repair		
M	Thousand	**SIP**	State Implementation Plan
MACT	Maximum Achievable Control Technology	**SO_2**	Sulfur Dioxide
		TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	**TPY**	Tons per Year
MM	Million	**TRS**	Total Reduced Sulfur
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**TSP**	Total Suspended Particulate
		USEPA	United States Environmental Protection Agency
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour		
		UTM	Universal Transverse Mercator
NA	Not Applicable	**VEE**	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	**VOC**	Volatile Organic Compounds
		VOL	Volatile Organic Liquids
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

2.4.1. This permit supersedes and replaces previously issued Permit Registration GP70-A124B. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3350, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by

improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40CFR§61.145, 40CFR§61.148, and 40CFR§61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40CFR§61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary

exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 CFR Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded

in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:
Drector
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

If to the US EPA:
Associate Director
Office of Air Enforcement and Compliance Assistance
(3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

If to Environmental Compliance and Enforcement:
DEPAirQualityReports@wv.gov

3.5.4. Operating Fee

3.5.4.1. In accordance with 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the certificate has been issued, and shall be

made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;
b. The date(s) analyses were performed;
c. The company or entity that performed the analyses;
d. The analytical techniques or methods used;
e. The results of the analyses; and
f. The operating conditions existing at the time of sampling or measurement.

4.1.2. **Minor Source of Hazardous Air Pollutants (HAP).** HAP emissions from the facility shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of HAPs. Compliance with this Section shall ensure that the facility is a minor HAP source.

4.1.3. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate the control devices listed in Section 1.1 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.1.4. **Record of Malfunctions of Air Pollution Control Equipment.** For the control devices listed in Section 1.1, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.
b. Steps taken to minimize emissions during the event.
c. The duration of the event.
d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.
f. Steps taken to correct the malfunction.
g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.1.5 The permittee shall not exceed the number and type of components (valves, pump seals, connectors, etc.) in gas/vapor or light liquid (as applicable) listed in Attachment L of Permit Application R13-3349.

4.1.6. The permittee shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to prevent any substantive fugitive escape of regulated air pollutants. Any above-ground piping, valves, pumps, etc. that shows signs of excess wear and that have a reasonable potential for substantive fugitive emissions of regulated air pollutants shall be replaced.

5.0 Source-Specific Requirements [Gas and Oil Well Affected Facility (NSPS Subpart OOOO/OOOOa)]

5.1 Limitations and Standards

5.1.1 The permittee of each gas well affected facility which commenced construction, modification or reconstruction after August 23, 2011, and on or before September 18, 2015 shall comply with the applicable requirements specified in 40 CFR Part 60, Subpart OOOO.

5.1.2. *Completion Combustion Devices/Temporary Flares/Incinerators/Vapor Combustors/Enclosed Combustors.* These devices are subject to the applicable requirements specified in 45CSR6.

6.0 Source-Specific Requirements [Gas Production Units (GPU-1 through GPU-3)]

6.1 Limitations and Standards

6.1.1. Maximum Design Heat Input. The maximum design heat input for each of the Gas Production Unit (GPU) burners (GPU-1 through GPU-3) shall not exceed 1.50 MMBTU/hr.

6.1.2. Maximum emissions from each of the 1.5 MMBTU/hr GPU burners (GPU-1 through GPU-3) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.15	0.64
Carbon Monoxide	0.12	0.54

6.1.3. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

6.2. Monitoring Requirements

6.2.1 At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Section 6.1.3. Method 9 shall be conducted in accordance with 40 CFR 60 Appendix A.

6.3. Testing Requirements

6.3.1. Upon request of the Secretary, compliance with the visible emission requirements of section 6.1.3. shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Secretary. The Secretary may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of section 6.1.3. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR§2-3.2.]

6.4. Recordkeeping Requirements

6.4.1. The permittee shall maintain records of all monitoring data required by Section 6.2.1. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

6.5. Reporting Requirements

6.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

7.0. Source-Specific Requirements [Line Heater (HTR-1)]

7.1. Limitations and Standards

7.1.1. Maximum Design Heat Input. The maximum design heat input for the Line Heaters (HTR-1) shall not exceed 1.50 MMBTU/hr.

7.1.2. Maximum emissions from each the 1.50 MMBTU/hr Line Heater (HTR-1) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.15	0.64
Carbon Monoxide	0.12	0.54

7.1.3. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

7.2. Monitoring Requirements

7.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Section 7.1.3. Method 9 shall be conducted in accordance with 40 CFR 60 Appendix A.

7.3. Testing Requirements

7.3.1. Upon request of the Secretary, compliance with the visible emission requirements of section 7.1.3. shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Secretary. The Secretary may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of section 7.1.3. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR§2-3.2.]

7.4. Recordkeeping Requirements

7.4.1. The permittee shall maintain records of all monitoring data required by Section 7.2.1. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

7.5. Reporting Requirements

7.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

8.0 Source-Specific Requirements [Flash Separator Heater(SEP-1), Condensate Stabilizer Heater (CS-1)]

8.1 Limitations and Standards

8.1.1. Maximum Design Heat Input. The maximum design heat input for the Flash Separator Heater (SEP-1) shall not exceed 1.00 MMBTU/hr and for the Condensate Stabilizer Heater (CS-1) shall not exceed 0.75 MMBtu/hr.

8.1.2. Maximum emissions from the 1.00 MMBTU/hr Flash Separator Heater (SEP-1) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.10	0.43
Carbon Monoxide	0.08	0.36

8.1.3 Maximum emissions from the 0.75 MMBTU/hr Condensate Stabilizer Heater (CS-1) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.07	0.32
Carbon Monoxide	0.06	0.27

8.1.4. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

8.2. Monitoring Requirements

8.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Section 8.1.4. Method 9 shall be conducted in accordance with 40 CFR 60 Appendix A.

8.3. Testing Requirements

8.3.1. Upon request of the Secretary, compliance with the visible emission requirements of section 8.1.4. shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Secretary. The Secretary may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of section 8.1.4. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR§2-3.2.]

8.4. Recordkeeping Requirements

8.4.1. The permittee shall maintain records of all monitoring data required by Section 8.2.1. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6 - 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

8.5. Reporting Requirements

8.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

9.0. Source-Specific Requirements [Storage Vessels (CTK-1 through CTK-3 and PTK-1 through PTK-3)]

9.1. Limitations and Standards

9.1.1. Maximum emissions from each of the 400 bbl condensate storage tanks (CTK-1 through CTK-3) and each of the 400 bbl produced water tanks (PTK-1 through PTK-3) shall not exceed the following limits:

Storage Tank ID	Pollutant	Maximum Annual Emissions (ton/year) (each storage tank)
CTK-1 through CTK-3	VOC	1.82
PTK-1 through PTK-3	VOC	0.01

9.1.2. *Control Devices.* The permittee shall install, operate, and maintain the enclosed combustor (CTRL-1) for the purpose of controlling emissions from the storage vessels (CTK-1 through CTK-3 and PTK-1 through PTK3). The permittee shall route all VOC and HAP emissions from the storage vessels (CTK-1 through CTK-3 and PTK-1 through PTK3) to the enclosed combustor (CTRL-1), prior to release to the atmosphere. The vapor recovery system shall be designed to achieve a minimum guaranteed control efficiency of 98% for volatile organic compound (VOC) and hazardous air pollutants (HAP) emissions.

9.1.3. The maximum monthly throughput of product to each of the 400 bbl storage tanks shall not exceed the following:

Storage Tank ID	Product Stored	Maximum Monthly Throughput (gal/year)
CTK-1 through CTK-3	Condensate	255,500
PTK-1 through PTK-3	Produced Water	1,277,500

9.2. Monitoring Requirements

9.2.1. The permittee shall monitor and maintain quarterly records of the temperature and pressure upstream of any storage vessel containing condensate and/or produced water at the appropriate separation unit based on the calculation methodology or model being used by the permittee to calculate their VOC flash emissions.

9.2.2. The permittee shall monitor the throughput to the storage vessels (CTK-1 through CTK-3 and PTK-1 through PTK3) on a monthly basis.

9.3. Recordkeeping Requirements

9.3.1. The permittee shall maintain a record of the aggregate throughput for the storage vessels (CTK-1 through CTK-3 and PTK-1 through PTK3) that contain condensate and/or produced water on a monthly and rolling twelve (12) month total. Said records shall be maintained in accordance with section 3.4.1 of this permit.

9.3.2. To demonstrate compliance with section 9.1.1 of this permit, the permittee shall maintain records of the determination of the VOC emission rate per storage vessel (CTK-1 through CTK-3), including identification of the model or calculation methodology used to calculate the VOC emission rate.

10.0. Source-Specific Requirements [Enclosed Combustor (CRTL-1)]

10.1. Limitations and Standards

10.1.1. Maximum Design Heat Input. The maximum design heat input for the enclosed combustor (CRTL-1) shall not exceed 18.42 MMBtu/hr.

10.1.2. The permittee shall, to the extent practicable, install, maintain, and operate the enclosed combustor and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

10.1.3. The permittee shall comply with the requirements in this section for the enclosed combustor (CRTL-1):

i. Vapors that are being controlled by the enclosed combustor (CRTL-1) shall be routed to the enclosed combustor at all times.

ii. The enclosed combustor (CRTL-1) shall be operated with a flame present at all times, as determined by the methods specified in permit conditions 10.2.1.

iii. The enclosed combustor (CRTL-1) shall be designed for and operated with no visible emissions as determined by the methods specified in permit condition 10.3.1. except for either (a) or (b):

a. periods not to exceed a total of one minute during any 15 minute period, determined on a monthly basis; or

b. periods not to exceed a total of two (2) minutes during any hour, determined on a quarterly basis if the enclosed combustion device installed was a model tested under § 60.5413(d) which meets the criteria in § 60.5413(d)(11).

iv. The enclosed combustor (CRTL-1) shall be operated at all times when emissions are vented to it.

v. To ensure compliance with 10.1.3(iv) above, the permittee shall monitor in accordance with section 10.2.1 of this permit.

vi. The permittee shall operate and maintain the enclosed combustor (CRTL-1) according to the manufacturer's specifications for operating and maintenance requirements to maintain a guaranteed control efficiency of 98% for volatile organic compounds and hazardous air pollutants.

vii. *Closed Vent System.* The permittee shall comply with the closed vent system requirements in section 10.1.4.

viii. The registered enclosed combustion device is subject to the applicable requirements specified in 45CSR6.

10.1.4 *Closed Vent Systems.* The permittee shall comply with the closed vent system requirements in this section. The potential emissions that were calculated to determine affected facility status included recovered or controlled vapors from the storage vessels (CTK-1 through CTK-3 and PTK-1 through PTK-3).

1. You must design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage vessel to a control device that meets the requirements of permit condition 10.1.3.

2. You must design and operate a closed vent system with no detectable emissions, as determined following the procedures in permit condition 4.1.6 for ongoing compliance.

3. You must comply with either paragraph (A) or (B) of this section for each bypass device.

   A. You must properly install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that could divert the stream away from the control device or process to the atmosphere that sounds an alarm, or initiates notification via remote alarm to the nearest field office, when the bypass device is open such that the stream is being, or could be, diverted away from the control device or process to the atmosphere.

   B. You must secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

4. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of 10.1.4.3. of this section. **[45CSR§13-5.11.]**

10.2. Monitoring Requirements

10.2.1. To demonstrate compliance with the pilot flame requirements of sections 10.1.3.ii of this permit, the permittee shall follow (i) and (ii).

i. The presence of a pilot flame shall be continuously monitored using a thermocouple or any other equivalent device to detect the presence of a flame when emissions are vented to it. The pilot shall be equipped such that it sounds an alarm, or initiates notification via remote alarm to the nearest field office, when the pilot light is out.

ii. For any absence of pilot flame, or other indication of smoking or improper equipment operation, you must ensure the equipment is returned to proper operation as soon as practicable after the event occurs. At a minimum, you must: (1) Check the air vent for obstruction. If an obstruction is observed, you must clear the obstruction as soon as practicable. (2) Check for liquid reaching the combustor.

iii. The permittee is exempt from the pilot flame requirements of permit condition 10.2.3.i and 10.2.3.ii if the permittee installed an enclosed combustion device model that was tested under § 60.5413(d) which meets the criteria in § 60.5413(d)(11).

10.2.2. To demonstrate compliance with the closed vent system requirements of section 10.1.4 of this permit, the permittee shall:

a. *Initial requirements.* The permittee shall follow the procedures permit condition 4.1.6. The initial inspection shall include the bypass inspection, conducted according to paragraph (b) of this section.

b. *Bypass inspection.* Visually inspect the bypass valve during the initial inspection for the presence of the car seal or lock-and-key type configuration to verify that the valve is maintained in the non-diverting position to ensure that the vent stream is not diverted through the bypass device. If an alternative method is used, conduct the inspection of the bypass as described in the operating procedures.

c. *Unsafe to inspect requirements.* You may designate any parts of the closed vent system as unsafe to inspect if the requirements in paragraphs (i) and (ii) of this section are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs (a) and (b) of this section.

i. You determine that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the requirements.

ii. You have a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
[45CSR§13-5.11.]

10.3. Testing Requirements

10.3.1. To demonstrate compliance with the visible emissions requirements of permit condition 10.1.3, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for all emission sources subject to an opacity limit.

i. The visible emission check shall determine the presence or absence of visible emissions. The observations shall be conducted according to Section 11 of EPA Method 22. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course. The observation period shall be:

a. a minimum of 15 minutes if demonstrating compliance with 10.1.3.iii(a); or
c. a minimum of 1 hour if demonstrating compliance with 10.1.3.iii(b)

ii. The visible emission check shall be conducted initially within 180 days of start-up to demonstrate compliance while vapors are being sent to the control device.

iii. If during this visible emission check or at any other time visible emissions are observed, compliance with section 10.1.3(viii) of this permit shall be determined by conducting opacity tests in accordance with Method 9 or 40 CFR 60, Appendix A.

10.3.2. At such reasonable times as the Secretary may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5, and volatile organic compound loading, by using Methods 18 and 25A of 40 CFR Part 60, Appendix A, Method 320 of 40 CFR Part 63, Appendix A, or ASTM D 6348-03 or other equivalent U.S. EPA approved method approved by the Secretary, in exhaust gases. Such tests shall be conducted in such manner as the Secretary may specify and be filed on forms and in a manner acceptable to the Secretary. The Secretary may, at the Secretary's option, witness or conduct such stack tests. Should the Secretary exercise his or her option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. The Secretary may conduct such other tests as the Secretary may deem necessary to evaluate air pollution emissions other than those noted above.
[45CSR6§7.1 and §7.2]

10.4 Recordkeeping Requirements

10.4.1 For the purpose of demonstrating compliance with the continuous pilot flame requirements in permit condition 10.1.3, the permittee shall maintain records of the times and duration of all periods when the pilot flame was not present and vapors were vented to the device.

i. If the permittee is demonstrating compliance to 10.2.1 of this permit with visual inspections, the permittee shall maintain records of the inspections.

ii. If the permittee is demonstrating compliance to 10.2.1 of this permit with an enclosed combustion device model that was tested under the conditions of § 60.5413(d), a record shall be maintained of the performance test results.

10.4.2. For the purpose of demonstrating compliance with the visible emissions and opacity requirements, the permittee shall maintain records of the visible emission opacity tests and checks. The permittee shall maintain records of all monitoring data required by permit condition 10.3.1 documenting the date and time of each visible emission check, the emission point or equipment/ source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the evaluation, the record of observation may note "out of service" (O/S) or equivalent.

10.4.3. To demonstrate compliance with permit condition 10.1.3., the permittee shall maintain records of the manufacturer's specifications for operating and maintenance requirements to maintain the control efficiency.

10.4.4. To demonstrate compliance with the closed vent monitoring requirements in section 10.2.2 of this general permit, records shall be maintained of:

i. The initial compliance requirements;

ii. If you are subject to the bypass requirements, the following records shall also be maintained:

(a) Each inspection or each time the key is checked out or a record of each time the alarm is sounded;

(b) Each occurrence that the control device was bypassed. If the device was bypassed, the records shall include the date, time, and duration of the event and shall provide the reason that the event occurred. The record shall also include the estimate of emissions that were released to the environment as a result of the bypass.

iii. Any part of the system that has been designated as "unsafe to inspect" in accordance with 10.2.2(c).

[45CSR§13-5.11.]

10.4.5. The permittee shall maintain records of any testing that is conducted according to section 10.3 of this permit.

10.4.6. All records required under Section 10.4 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the DAQ or his/her duly authorized representative for

expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

10.4.7. To demonstrate compliance with permit condition 10.1.1, the permittee shall record the volume of gas flared on a monthly basis.

10.5. Reporting Requirements

10.5.1. Any deviation of the allowable visible emission requirement for any emission source discovered during observation using 40CFR Part 60, Appendix A, Method 9 per permit condition 10.3.1(iii) must be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

10.5.2. Any bypass event of the registered control device must be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the date of the bypass, the estimate of VOC emissions released to the atmosphere as a result of the bypass, the cause or suspected cause of the bypass, and any corrective measures taken or planned.

10.5.3. Any time the air pollution control device is not operating when emissions are vented to it, shall be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days of the discovery.

11.0. Source-Specific Requirements [Condensate Truck Loading (TRL-1)/Produced Water Truck Loading (TRL-2)]

11.1 Limitations and Standards

11.1.1. The maximum quantity of condensate that shall be loaded (TRL-1) shall not exceed 766,500 gallons per year. The maximum quantity of produced water that shall be loaded (TRL-2) shall not exceed 3,832,500 gallons per year. Compliance with the maximum yearly operation limitations shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the gallons loaded at any given time during the previous twelve consecutive calendar months.

11.1.2. The Condensate Truck Loading (TRL-1) and Produced Water Truck Loading (TRL-2) shall be operated in accordance with the plans and specifications filed in Permit Application R13-3350.

11.2. Recordkeeping Requirements

11.2.1. All records required under Section 11.2 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

11.2.2. To demonstrate compliance with permit condition 11.1.2, the permittee shall maintain a record of the aggregate condensate and produced water throughputs for the product loadout rack on a monthly and rolling twelve month total. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

12.0 Source-Specific Requirements [Generator Engine (ENG-2), 40CFR60 Subpart JJJJ Requirements, 40CFR63 Subpart ZZZZ Requirements]

12.1. Limitations and Standards

12.1.1. Maximum emissions from the 47 hp natural gas fired reciprocating engine, HiPower PSI/GM 3.0L natural gas-fired generator (ENG-2) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.29	1.27
Carbon Monoxide	0.50	2.18

12.1.2. The provisions of this subpart are applicable to . . . owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP
[40CFR §60.4230(a)(4)(iii)]

12.1.3. *Emission Standard.* Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE.
[40CFR§60.4233(d)]

12.1.4. *Compliance Demonstration With Emission Standard.* An owner or operator of a stationary SI internal combustion engine [that] must comply with the emission standards specified in §60.4233(d) or (e), must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.
[40CFR§60.4243(b)(1)]

12.1.5 The permittee shall operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.
[40CFR§60.4243(a)((1)]

12.1.6 If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

i. If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.
[40CFR§60.4243(a)(2)(i)]

12.1.7. Periods of start-up and shut-down shall not exceed 30 minutes per occurrence. The permittee shall operate the engine in a manner consistent with good air pollution control practices for minimizing emissions at all times, including periods of start-up and shut-down. The permittee shall comply with all applicable start-up and shut-down requirements in accordance with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ.

12.1.8 The permittee must comply with the applicable operating limitations in this section no later than October 19, 2013.
[40CFR§63.6595(a)]

12.1.9. *Stationary RICE subject to Regulation under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of 40CFR§63.6590 of Subpart ZZZZ must meet the requirements of this subpart by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

The permittee meets the criteria of paragraph (c)(1), which is for a new or reconstructed stationary RICE located at an area source. The permittee must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart JJJJ.
[40CFR§63.6590(c)]

12.2 Recordkeeping Requirements

12.2.1. To demonstrate compliance with permit condition 12.1.5, the permittee shall maintain records of the maintenance performed on the engine (ENG-1).
[40CFR§60.4243(a)((1)]

12.2.2. The permittee shall comply with all applicable recordkeeping requirements under NSPS for Stationary Compression Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart IIII, Stationary Spark Ignition Internal Combustion Engines specified in 40 CFR Part 60, Subpart JJJJ, and/or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Spark Ignition and Compression Ignition Internal Combustion Engines specified in 40 CFR Part 63, Subpart ZZZZ.

12.2.3. All records required by this section shall be maintained in accordance with section 3.4.1 of this permit.

12.2.4. Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

a. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

1. All notifications submitted to comply with this subpart and all documentation supporting any notification.

2. Maintenance conducted on the engine.

3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048.

4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.
[40CFR§60.4245(a)]

12.3 Reporting Requirements

12.3.1. Owners and operators of stationary SI ICE that perform performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed to the Director of Air Quality.
[40CFR§60.4245(d)]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Carney, Jonathan W

From: Evan Pearson <evan.pearson@ascentresources.com>
Sent: Monday, February 20, 2017 11:30 AM
To: Carney, Jonathan W
Subject: RE: Ascent Resources -Marcellus, LLC Draft Permit review

Good Morning Jonathan,

I apologize for not getting back to you on Friday. I've reviewed the G70-D Closed Vent requirements for Non-OOOO facilities and have no issue with the Mary Miller or Criswell draft permits as written.

Thank you for taking the time to discuss this section of the draft permits with me. I greatly appreciate it.

Evan

From: Evan Pearson
Sent: Thursday, February 16, 2017 3:49 PM
To: 'Carney, Jonathan W' <Jonathan.W.Carney@wv.gov>
Subject: RE: Ascent Resources -Marcellus, LLC Draft Permit review

Hi Jonathan,

Please see my response in red text. Please consider this a response for both the Mary Miller and Criswell draft permit and evaluation.

Draft Permit:

- Sections 10.1.4, 10.2.2, 10.4.4, and 10.5.2 Closed Vent Systems, our tanks are not an OOOO Affected Storage Vessel facility. In the previous G70-A permit, we requested an FEL for the tanks, is this language standard or may it be removed?

  Closed vent systems are a vital part of any capture system such as the combustor used to reduce emissions to non-NSPS levels. Additionally, EPA has identified closed vent systems as sources of emissions that should be controlled. These are reasonable conditions under 45CSR13 section 5.11. To ensure that the overall capture and control efficiency is achieved, these permit conditions are required.

  The site is equipped with a combustor and is equipped with a capture system. The site is not subject to NSPS Subpart OOOO or NSPS Subpart OOOOa, which require closed vent systems with no emissions. We understand that the EPA recognizes emissions from storage tanks as something that needs to be controlled and we have controlled the storage tanks. However, Ascent disagrees that there is any regulatory requirement to operate closed vent systems with no detectible emissions if they are not subject to NSPS Subpart OOOO or NSPS Subpart OOOOa. If a closed vent system was in place, we would be able to claim 100% capture. Instead, the use of 98% "capture" allows for both routine operational leaks in the capture system and for various tank openings from activities such as sampling, etc. This is a conservative permitting mechanism since Ascent operations personnel will continue to take all actions possible to limit leaks to the closed vent system since outside air will negatively impact the operations of the control equipment.

  If the closed vent requirements have been recently established for ALL controlled facilities by the DEP, could you please provide us with any guidance/documents that establish this, so we may incorporate it in the future.

Draft Evaluation:

- In 40CFR60, Subpart OOOO, section d., can language requesting the federally enforceable limits on tanks be included?

The tanks are not affected facilities under 40CFR60 Subpart OOOO because the VOC emissions were not reduced to less than 6 tpy subsequent to 30 days after start up. Before or during this 30 days it was calculated (including the enclosed combustor control) that emissions did not exceed 6 tpy.

The language in the original permit application requests a federally enforceable limit by using the controls to keep emissions under 6 TPY: "Based on PTE calculations included within this permit, emissions from each storage vessel will be routed to an enclosed combustion device such that the total tank emissions for the entire facility are below 6 tons per year (tpy) of VOC. **The operation of the enclosed combustion device will be a legally and practically enforceable permit condition."**

Based on first 30 days production, emissions from the tanks were potentially over 6 TPY, but the combustor controlled them under, and continues to do so. The permit provides a federally enforceable limit (FEL) on the tanks, therefore we respectively request the following language to be clear that a FEL is in place: "The storage vessels located at the facility are controlled by an enclosed combustor, which will reduce the potential to emit to less than 6 tpy of VOC. Ascent has requested that the federally enforceable limits, previously established, remain on the tanks. Therefore, Ascent is not subject to NSPS Subpart OOOO for storage tanks at this time."

Thank you,
Evan

From: Carney, Jonathan W [mailto:Jonathan.W.Carney@wv.gov]
Sent: Thursday, February 16, 2017 12:37 PM
To: Evan Pearson <evan.pearson@ascentresources.com>
Subject: RE: Ascent Resources -Marcellus, LLC Draft Permit review

Ms. Pearson,

Your comments below are followed by DEP's responses to your comments.

Draft Permit:

- Section 9.1.1 Maximum emissions from storage tanks, should water tanks be included in this table?

  Emission limits for the produced water tanks have been included in the permit.

- Sections 10.1.4, 10.2.2, 10.4.4, and 10.5.2 Closed Vent Systems, our tanks are not an OOOO Affected Storage Vessel facility. In the previous G70-A permit, we requested an FEL for the tanks, is this language standard or may it be removed?

  Closed vent systems are a vital part of any capture system such as the combustor used to reduce emissions to non-NSPS levels. Additionally, EPA has identified closed vent systems as sources of emissions that should be controlled. These are reasonable conditions under 45CSR13 section 5.11. To ensure that the overall capture and control efficiency is achieved, these permit conditions are required.

- Section 11.1.1 Enclosed combustor, the combustor is not used to control emissions during truck loading.

  This section has been removed.

- Section 12.12, there are three periods breaking up the sentence, is this a typo or missing language?

  *It is an ellipsis. The word **manufacturers** was omitted because the facility does not manufacture engines.*

- Section 13.1.2 Gas Buster limitations, in our previous permit, we did not have a limit on the number of blow downs. Can this be updated as long as we comply with the maximum emissions limits?

  The yearly limit is based on the number of blowdowns per year so if the number of blowdowns is changed then the maximum yearly limit would also have to change. Such changes should be made before the beginning of the public comment period or once the permit is issued these changes will have to be made via permit application.

Draft Evaluation:

- In Description of Process, can the following statement be removed:
  'If needed, the condensate and produced water loading may be vapor balanced to the tanks and controlled by the enclosed combustion device (E019).'

This statement has been removed as requested.

- In 40CFR60, Subpart OOOO, section d., can language requesting the federally enforceable limits on tanks be included?

  The tanks are not affected facilities under 40CFR60 Subpart OOOO because the VOC emissions were not reduced to less than 6 tpy subsequent to 30 days after start up. Before or during this 30 days it was calculated (including the enclosed combustor control) that emissions did not exceed 6 tpy.

- In the table under 45CSR19, the total Ozone (VOC) for the facility is 18.84 tpy. Will you correct this number from 1.00 tpy?

  This table has been changed as requested.

Jonathan Carney

Jonathan Carney, P.E.
Environmental Protection
NSR Air Permitting

(304) 926-0499 ext. 1203
Jonathan.W.Carney@wv.gov
601 57th St SE
Charleston, WV 25304

From: Evan Pearson [mailto:evan.pearson@ascentresources.com]
Sent: Wednesday, February 15, 2017 11:07 AM
To: Carney, Jonathan W <Jonathan.W.Carney@wv.gov>
Subject: RE: Ascent Resources -Marcellus, LLC Draft Permit review

Good Morning Jonathan,

After reviewing, I have a couple of questions regarding the Mary Miller Draft Permit and Evaluation. Please see below.

Draft Permit:

- Section 9.1.1 Maximum emissions from storage tanks, should water tanks be included in this table?
- Sections 10.1.4, 10.2.2, 10.4.4, and 10.5.2 Closed Vent Systems, our tanks are not an OOOO Affected Storage Vessel facility. In the previous G70-A permit, we requested an FEL for the tanks, is this language standard or may it be removed?
- Section 11.1.1 Enclosed combustor, the combustor is not used to control emissions during truck loading.
- Section 12.12, there are three periods breaking up the sentence, is this a typo or missing language?
- Section 13.1.2 Gas Buster limitations, in our previous permit, we did not have a limit on the number of blow downs. Can this be updated as long as we comply with the maximum emissions limits?

Draft Evaluation:

- In Description of Process, can the following statement be removed:
  'If needed, the condensate and produced water loading may be vapor balanced to the tanks and controlled by the enclosed combustion device (E019).'
- In 40CFR60, Subpart OOOO, section d., can language requesting the federally enforceable limits on tanks be included?
- In the table under 45CSR19, the total Ozone (VOC) for the facility is 18.84 tpy. Will you correct this number from 1.00 tpy?

Thank you,

Evan

From: Carney, Jonathan W [mailto:Jonathan.W.Carney@wv.gov]
Sent: Thursday, February 09, 2017 12:39 PM
To: Evan Pearson <evan.pearson@ascentresources.com>
Subject: Ascent Resources -Marcellus, LLC Draft Permit review

Ascent Resources – Marcellus, LLC
Mary Miller
Permit Application: R13-3349
Plant ID No.: 103-00104

Attached are the draft modification permit and draft engineering evaluation for the subject permit. Please, review these draft documents and send your comments to me by Wednesday February 15, 2017. My manager has received a copy of these draft documents and will be reviewing them concurrently. Depending on my manager's timing, I may be able to extend the time for your review so if you need more time to review, please let me know by Wednesday when you believe you can complete your review. Thank you.

Jonathan Carney.

Jonathan Carney, P.E.
Environmental Protection
NSR Air Permitting

(304) 926-0499 ext. 1203
Jonathan.W.Carney@wv.gov
601 57th St SE
Charleston, WV 25304

This email (and attachments if any) is intended only for the use of the individual or entity to which it is addressed, and may contain information that is confidential or privileged and exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately by return email and destroy all copies of the email (and attachments if any).

Carney, Jonathan W

From: Carney, Jonathan W
Sent: Wednesday, December 14, 2016 1:16 PM
To: 'Evan Pearson'
Subject: WV DAQ NSR Permit Application Complete for Ascent Resources-Marcellus, LLC - WJ Criswell 405

RE: Application Status: Complete
Ascent Resources-Marcellus, LLC
Permit Application R13-3350
Plant ID No. 103-00098

Evan Foster Pearson,

Your application for a modification permit for a Natural Gas Production facility was received by this Division on November 16, 2016 and assigned to the writer for review. Upon review of said application, it has been determined that the application is complete and, therefore, the statutory review period commenced on December 14, 2016.

In the case of this application, the agency believes it will take approximately 90 days to make a final permit determination.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact Jonathan Carney at (304) 926-0499 ext. 1203 or reply to this email.

Jonathan Carney, P.E.
Environmental Protection
NSR Air Permitting

(304) 926-0499 ext. 1203
Jonathan.W.Carney@wv.gov
601 57th St SE
Charleston, WV 25304

Carney, Jonathan W

From: Evan Pearson <evan.pearson@ascentresources.com>
Sent: Wednesday, December 14, 2016 11:26 AM
To: Carney, Jonathan W
Subject: RE: Ascent Resources - Marcellus, LLC WJ Criswell 405 Clarification
Attachments: Pages from Criswell_R13_FINAL.pdf

Jonathan,

Please see the corrected process description attached. Again, my apologies for the confusion.

Thanks,
Evan

From: Carney, Jonathan W [mailto:Jonathan.W.Carney@wv.gov]
Sent: Wednesday, December 14, 2016 10:10 AM
To: Evan Pearson <evan.pearson@ascentresources.com>
Subject: RE: Ascent Resources - Marcellus, LLC WJ Criswell 405 Clarification

Mr. Pearson,

See the attached documents for clarification.

Just to be clear, the documents that you attached in your previous response are the correct pages to the application right?

If so, I will print them out and attach them to the application.

Thank you,

Jonathan Carney

From: Evan Pearson [mailto:evan.pearson@ascentresources.com]
Sent: Wednesday, December 14, 2016 10:52 AM
To: Carney, Jonathan W <Jonathan.W.Carney@wv.gov>
Subject: RE: Ascent Resources - Marcellus, LLC WJ Criswell 405 Clarification

Hi Jonathan,

I'm a little confused. In reviewing the application, I found the Line Heaters (HTR-1 to HTR-3) in Attachment F, I and N. I've attached the pages as a reference.

Will you clarify what is not matching up in the application for the Line Heaters?

Thanks,
Evan

From: Carney, Jonathan W [mailto:Jonathan.W.Carney@wv.gov]
Sent: Wednesday, December 14, 2016 9:15 AM
To: Evan Pearson <evan.pearson@ascentresources.com>
Subject: Ascent Resources - Marcellus, LLC WJ Criswell 405 Clarification

Application No.:	**R13-3350**
Plant ID No.:	**103-00098**
Applicant:	**Ascent Resources-Marcellus, LLC**
Facility Name:	**WJ Criswell 405**
Location:	**Four Mile Rd, Wileyville, WV**

Mr. Pearson,

In the process description, on page G-2 of the application, it is written that there are three (3) 1.5 MMBtu/hr line heater (HTR-1 to HTR-3). This does not match the equipment in the flow diagram (Attachment F) or the Emission Units Table (Attachment I) or the supporting emissions calculations in Attachment N. Please, correct the application as necessary and provide the corrected page(s) to me. You can email the corrected page(s) to me.

Thank you,

Jonathan Carney

Jonathan Carney, P.E.
Environmental Protection
NSR Air Permitting

(304) 926-0499 ext. 1203
Jonathan.W.Carney@wv.gov
601 57th St SE
Charleston, WV 25304

This email (and attachments if any) is intended only for the use of the individual or entity to which it is addressed, and may contain information that is confidential or privileged and exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately by return email and destroy all copies of the email (and attachments if any).

Carney, Jonathan W

From: Ward, Beth A
Sent: Thursday, November 17, 2016 1:50 PM
To: Carney, Jonathan W
Subject: ASCENT RESOURCES-MARCELLUS LLC (WJ CRISWELL 405 & MARY MILLER) PERMIT APPLICATION FEES

This is the receipt for payment received from:

ASCENT RESOURCES – MARCELLUS LLC, WJ CRISWELL 405, CHECK NUMBER 000005416, CHECK DATE 11/02/2016, $2,000.00
R13-3350 ID# 103-00098

ASCENT RESOURCES – MARCELLUS LLC, MARY MILLER, CHECK NUMBER 000005415, CHECK DATE 11/02/2016, $2,000.00
R13-3349 ID# 103-00104

OASIS CR 1700054874

THANK YOU!

Beth Ward

WV DEPARTMENT OF ENVIRONMENTAL PROTECTION
BTO FISCAL
601 57TH STREET SE
CHARLESTON, WV 25304
(304) 926-0499 EXT 1846
beth.a.ward@wv.gov

Carney, Jonathan W

From:	Adkins, Sandra K
Sent:	Thursday, November 17, 2016 11:18 AM
To:	tim.cummings@ascentresources.com; Evan Pearson
Cc:	McKeone, Beverly D; Carney, Jonathan W
Subject:	WV DAQ Permit Application Status for Ascent Resources - Marcellus, LLC; WJ Criswell 405

RE: Application Status
Ascent Resources – Marcellus, LLC
WJ Criswell 405
Facility ID No. 103-00098
Application No. R13-3350

Mr. Cummings,

Your application for a modification permit for the WJ Criswell 405 facility was received by this Division on November 16, 2016, and was assigned to Jonathan Carney. The following item was not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.

This item is necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Jonathan stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

For future applications, please submit one original and two electronic versions. Electronic versions should contain signatures.

Should you have any questions, please contact the assigned engineer, Jonathan Carney, at 304-926-0499, extension 1203.

WETZEL CHRONICLE

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Ascent Resources – Marcellus, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Construction Permit for the WJ Criswell 405 facility located near Wileyville, in Wetzel County, West Virginia. The latitude and longitude coordinates are: 39.60737°N, -80.61828°W

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be:

NOx= 10.07 TPY

CO = 34.82 TPY

VOC = 23.33 TPY

PM10= 0.28 TPY

SO2= <0.01 TPY

HAPs = 0.17 TPY

Startup of operation is planned to begin on or about the 16th day of November, 2016. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57thStreet, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the 16th day of November, 2016.

By:
Ascent Resources – Marcellus, LLC
Tim Cummings
VP - Operations
PO Box 13678
Oklahoma City, OK 73113
WC-11-16 13150

WV November 16, 2016

nia, County of Wetzel:

ared before the undersigned, a Notary Public,

Brian Clutter who, being duly sworn,

he manager of the Wetzel Chronicle, a weekly

neral circulation, published at New Martinsville,

, State of West Virginia, and that a copy of the

ereto was published for 1 successive

tzel Chronicle, beginning on the 16 day

er, 2016 and ending on the 16 day

ber, 2016.

Manager, Wetzel Chronicle

Subscribed and sworn to before me, a Notary Public of said County, on this 16 day of November, 2016.

Notary Public

My commission expires on the 5th day of January, 2021.

Printers Fee.....

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Diann S. Wright
218 South 2nd Ave
Paden City, WV 26159
My Commission Expires January 05, 2021

Permit / Application Information Sheet
Division of Environmental Protection
West Virginia Office of Air Quality

Company:	Ascent Resources - Marcellus, LLC			**Facility:**	WJ Criswell 405
Region:	2	**Plant ID:**	103-00098	**Application #:**	13-3350
Engineer:	Carney, Jonathan			**Category:**	
Physical Address:	Four Mile Rd Wileyville WV			**SIC:** [1311] OIL AND GAS EXTRACTION - CRUDE PETROLEUM & NATURAL GAS **NAICS:** [211111] Crude Petroleum and Natural Gas Extraction	
County:	Wetzel				
Other Parties:	ENV_CONT - Pearson, Evan Foster 405-252-7753				

Information Needed for Database and AIRS
1. Need valid physical West Virginia address with zip

Regulated Pollutants

Summary from this Permit 13-3350

Air Programs		Applicable Regulations
Fee Program	**Fee**	**Application Type**
	$2,000.00	MODIFICATION

Notes from Database

Activity Dates

APPLICATION RECIEVED	11/16/2016
APPLICATION FEE PAID	11/17/2016
ASSIGNED DATE	11/17/2016

NON-CONFIDENTIAL

Please note, this information sheet is not a substitute for file research and is limited to data entered into the AIRTRAX database.

Company ID: 103-00098
Company: Ascent Resources - Marcellus,
Printed: 11/17/2016
Engineer: Carney, Jonathan

Adkins, Sandra K

From: Adkins, Sandra K
Sent: Thursday, November 17, 2016 11:18 AM
To: 'tim.cummings@ascentresources.com'; 'Evan Pearson'
Cc: McKeone, Beverly D; Carney, Jonathan W
Subject: WV DAQ Permit Application Status for Ascent Resources - Marcellus, LLC; WJ Criswell 405

RE: Application Status
Ascent Resources – Marcellus, LLC
WJ Criswell 405
Facility ID No. 103-00098
Application No. R13-3350

Mr. Cummings,

Your application for a modification permit for the WJ Criswell 405 facility was received by this Division on November 16, 2016, and was assigned to Jonathan Carney. The following item was not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.

This item is necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Jonathan stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

For future applications, please submit one original and two electronic versions. Electronic versions should contain signatures.

Should you have any questions, please contact the assigned engineer, Jonathan Carney, at 304-926-0499, extension 1203.

Supersede 670 R13# 3350 Modification
103-00098 Jonathan

45CSR13 Administrative Update, Construction, Modification, Relocation, Temporary Permit or General Permit Registration Incomplete Application

A complete application is demonstrated when all of the information required below is properly prepared, completed and attached. The items listed below are required information which must be submitted with a 45CSR13 permit application. Any submittal will be considered incomplete if the required information is not included. The applicant must submit a complete application in order to receive a 45CSR13 permit.

☒ Class I legal advertisement not published in a newspaper certified to accept legal advertisements and original affidavit submitted.

☐ Application fee AND/OR additional application fees not included:
- ☐ $250 Class I General Permit
- ☐ $300 Class II Administrative Update
- ☐ $1,000 Construction, Modification, Relocation or Temporary Permit
- ☐ $500 Class II General Permit
- ☐ $1,000 NSPS
- ☐ $2,500 NESHAP
- ☐ $2,500 45CSR27 Pollutant
- ☐ $5,000 Major Modification
- ☐ $10,000 Major Construction

☐ Original and two (2) copies of the application not submitted.

☐ File organization – application pages are not numbered or in correct order, application is not bound in some way, etc.

☐ Confidential Business Information is not properly identified.

☐ General application forms not completed and signed by a responsible official.

☐ Authority of Corporation form not included – required if application is signed by someone other than a responsible official.

☐ Applicant is not registered with the West Virginia Secretary of State's Office.

☐ Copy of current Business Registration Certificate not included.

☐ Process description, including equipment and emission point identification numbers, not submitted.

☐ Process flow diagram, including equipment and emission point identification numbers, not submitted.

☐ Plot plan, including equipment and emission point identification numbers, not submitted.

☐ Applicable technical forms not completed and submitted:

- ☐ Emission Point Data Summary Sheets
- ☐ Air Pollution Control Device Sheets
- ☐ Emission Unit Data Sheets
- ☐ Equipment List Form

☐ Emission calculations not included – emission factors, references, source identification numbers, etc.

☐ Electronic submittal diskette not included.

Carney, Jonathan W

From: Carney, Jonathan W
Sent: Wednesday, December 14, 2016 1:16 PM
To: 'Evan Pearson'
Subject: WV DAQ NSR Permit Application Complete for Ascent Resources-Marcellus, LLC - WJ Criswell 405

RE: Application Status: Complete
Ascent Resources-Marcellus, LLC
Permit Application R13-3350
Plant ID No. 103-00098

Evan Foster Pearson,

Your application for a modification permit for a Natural Gas Production facility was received by this Division on November 16, 2016 and assigned to the writer for review. Upon review of said application, it has been determined that the application is complete and, therefore, the statutory review period commenced on December 14, 2016.

In the case of this application, the agency believes it will take approximately 90 days to make a final permit determination.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact Jonathan Carney at (304) 926-0499 ext. 1203 or reply to this email.

Jonathan Carney, P.E.
Environmental Protection
NSR Air Permitting

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Charleston, WV 25304